

REMARKS

Claims 1-7 and 10 remain pending in this application. Each of the pending claims is believed to define an invention that is novel and unobvious over the cited references. Favorable reconsideration of this case is respectfully requested.

Applicants appreciate Examiner's courtesy in conducting a personal interview with Applicant's representative. During the interview, the distinctions between the prior art and the present invention were discussed. In particular, it was explained that in embodiments of the invention, time critical functionality can be moved from the level of real time operating system to the lower level event control unit. Accordingly, the event control unit is not part of the processor that executes and/or schedules the instructions. Additionally, it was explained that another distinction over the cited art is the processing of the time performance constraints is suspended after the event controller begins operations. The Examiner noted that if all processing of the time performance constraints is suspended while the event control unit operates, this may be a differentiating factor over the prior art. The Examiner also noted that the claims should be distinguished from the concept of thread switching.

Regarding the objection to claim 1, claim 1 has been amended to correct the informality noted by the Examiner. Therefore, the withdrawal of the objection to claim 1 is respectfully requested.

Claims 1-7 have been rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent Number 5,826,072 to Knapp.

Independent claim 1 has been amended to recite that the controller is arranged to suspend all further processing of the time performance constraints after initiating operations in the event control unit. This feature is not disclosed or taught by the cited art. Knapp makes no mention of this claim element.

Accordingly, it is clear that the cited reference does not disclose each and every element recited in the claims as is required by 35 U.S.C. 102. Therefore, the withdrawal of this rejection is respectfully requested.

Claim 10 has been rejected under 35 U.S.C. 103(a) as being unpatentable over Knapp in view of Patterson.

Claim 10 depends from independent claim and is patentable over independent claim 1 for at least the reason discussed above regarding claim 1. Patterson does not supplement Knapp to teach or suggest the claimed invention. Therefore, the withdrawal of this rejection is respectfully requested.

Additionally, regarding thread switching, thread switching generally concerns switching a CPU from one thread to another. Thread switching involves suspending the current thread, saving its state, and then restoring the state of the thread being switched too. The thread switching actually completes at the moment a new program counter is loaded into the CPU. At that point, the CPU is no longer executing the thread switching code, it is executing codes associated with the new thread. For an example of thread switching, please see the abstract, for example, of U.S. Patent Number 6,567,839 which is cited on an accompanying Information Disclosure Statement.

As is understood from the above discussion and the cited patent, thread switching is realized in the operative system. Thread switching concerns internal handling of program execution in the processor. In comparison, embodiments of the invention concern handling of external events. Thus, thread switching does not inherently concern an event control unit. Furthermore, the time performance constraints point out when a results shall be achieved, which is in contradiction to the cited art. Specifically, the time performance constraints corresponds to a time interval to elapse before an event and access to the memory to extract or store data. Thus it can be seen the claimed invention is distinct from thread switching.

In view of the above, it is respectfully submitted that all pending claims are now in allowable form. Early issuance of a Notice of Allowance is respectfully solicited.

If the Examiner is of the opinion that the prosecution of this application would be advanced by a personal interview, the Examiner is invited to telephone undersigned counsel to arrange for such an interview.

In view of the above amendment, applicant believes the pending application is in condition for allowance.

The Commissioner is authorized to charge any fee necessitated by this Amendment to our Deposit Account No. 22-0261.

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Respectfully submitted,

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